



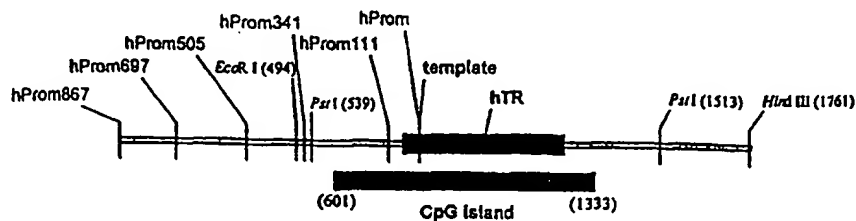
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(21) International Application Number: PCT/GB99/00308 (22) International Filing Date: 29 January 1999 (29.01.99) (30) Priority Data: 9801902.9 29 January 1998 (29.01.98) GB (71) Applicant (for all designated States except US): CANCER RESEARCH CAMPAIGN TECHNOLOGY LIMITED [GB/GB]; Cambridge House, 6-10 Cambridge Terrace, Regent's Park, London NW1 4JL (GB). (72) Inventor; and (75) Inventor/Applicant (for US only): KEITH, William, Nicol [GB/GB]; CRC Dept. of Medical Oncology, University of Glasgow, CRC Beatson Laboratories, Garscube Estate, Switchback Road, Glasgow G61 1BD (GB). (74) Agents: CRIPPS, Joanna, E. et al.; Mewburn Ellis, York House, 23 Kingsway, London WC2B 6HP (GB).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published Without international search report and to be republished upon receipt of that report.	

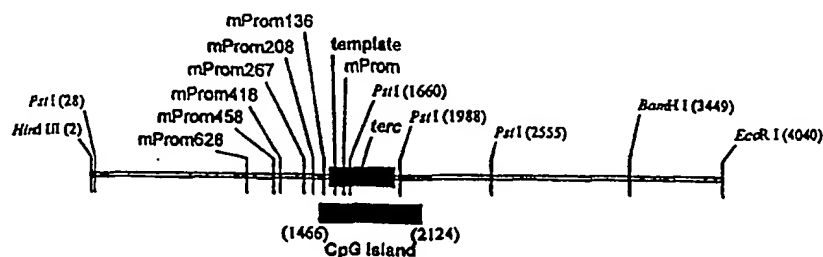
(54) Title: PROMOTER REGIONS OF THE MOUSE AND HUMAN TELOMERASE RNA COMPONENT GENES

(57) Abstract

The present invention relates to the identification of the genomic promoter region of the human and mouse telomerase RNA gene. Telomerase activity is necessary for the unrestricted proliferative capacity of many human cancers. It is proposed that mutation or dysregulation of the telomerase repression pathway may cause reactivation or upregulation of telomerase expression in cancer. The invention provides details of elements important for the regulation of telomerase RNA genes, including the Sp family of transcription factors. There is further provided methods for screening for elements having the ability for suppressing telomerase RNA gene promoter activity and use of such elements in the treatment of cancers. In addition, evidence is also provided for the development of new transcription based therapies for cancer and for genetic approaches to targeting therapeutic genes to cancer cells. Namely, (1) transcriptional repression and the disruption of signal transduction pathways regulating telomerase activation. (2) Tumour specific gene expression for genetic therapy via telomerase RNA gene promoters.



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